

## Abstract

The intent of this project was to identify whether there is a gap between catalogers' personal values related to cataloging assessment and their perceptions of their institutions' values. This article uses Q methodology to contrast those perspectives. The Q-statements for this study were based on the discourse represented in a literature review of articles related to cataloging assessment. A factor analysis of Q-sorts was used to identify themes in participant perceptions. The patterns identified support the research question, while also suggesting that consensus may be built around the ideas of usability, service, and access.

## Keywords

Cataloging

Cataloging administration / management

Cataloging evaluation / quality analysis

Cataloging research

College and university libraries

## Cataloging Assessment Values

### Introduction

Several years ago, I began casually researching cataloging assessment with the hope of identifying best practices for my library. From reading the literature, it did not appear that there is a single set of best practices; rather there exist a variety of practices that get pulled together depending on the needs of those doing the assessments. At the same time, I noticed that the way assessment is framed in the literature does not always match the conversations I have had with catalogers (and other librarians) about which parts of cataloging practice they think are important, which parts provide meaning for us and value for our users. While catalogers and other librarians will often reference support for library values as codified in the American Library Association Core Values, I perceived a disconnect between those values expressions and daily practices. I wondered if that was due to discord between personal values that individual catalogers hold and institutional values that are expressed through planning and decision making. In an effort to find out more about how people in the profession choose to assess their cataloging practices, I visited four academic libraries in the Midwest/Plains region of the United States to conduct a qualitative study called Q methodology.

### Literature Review

I started my literature review by searching for any assessment-related cataloging articles I could find, using the following terms: assessment, evaluation, quality control, performance measurement, efficiency, productivity, benchmarks, and workflow. Through those searches I also discovered articles about workplace flexibility, training, and user perceptions. I also sought out resources on organizational culture and management to obtain a broader viewpoint with which to analyze the library literature.

Writing specifically about libraries, Mitchell<sup>1</sup> observes that libraries frequently attempt to measure quality through quantitative means. While quantitative measures have their place, especially when looking for trends in activity over time or comparing library activities broadly, numbers do not necessarily say much about a library's value within its community. Even when making cross-library comparisons of technical services work specifically, the many recent changes in work processes and structures make those efforts difficult.

Examining modes of organizational influence, Simon<sup>2</sup> notes that establishing a culture, including attitudes, habits, and mindsets, can lead to organizationally beneficial decision making. Applying Simon's organizational management ideas to the realm of cataloging assessment, decisions about what and how to assess can be evaluated by determining whether the desired objectives are achieved. If objectives change, evaluation methods should change. However, while noting that changing objectives is sometimes necessary or desirable, one should also keep in mind that stable expectations can stimulate and direct attention or channel behaviors. There may also be organizational differences in how opportunities are noticed and how decisions are made. Some organizations may have more logical decision making, including explicit goals and objectives evaluated in relation to those goals, while others have more judgmental or intuitive decision making that does not include orderly, sequential evaluations; intuitive decisions are evaluated through insight rather than through a standardized process. The assessment methods noted in this article primarily fall into the logical category.

In their discussion of interviewing library deans and administrators about planning and assessment, Dole, Liebst and Hurych<sup>3</sup> identified terms associated with this work. They discovered that both deans and administrators used a mixture of numerical and anecdotal data to develop policies and make decisions about collections and services. The authors note that

individuals' use of these tools for decision making "related to the philosophy of leadership, need for information, personal interest in assessment, local organizational culture and pressures from the parent institution."<sup>4</sup> Even while they express support for data driven assessment, what Simon described as the logical model, deans and administrators may prioritize intuition and institutional directives when making decisions. Either way, whether determining which data to look at or which intuitions to acknowledge, a decision maker's values system is likely to guide their decision making<sup>5</sup>.

In Mugridge's<sup>6</sup> analysis of a survey of Pennsylvania academic libraries, the most commonly selected goal of assessment activities in technical services was to improve or streamline processes. This was followed by improving services and making better decisions. Lower on the list were using assessment information in strategic planning, allocating staff, and making peer comparisons. However, when asking about the actual outcomes of assessment activities, reallocating staff was the most common result, followed by streamlining processes and making collection development decisions. Once again, I am struck by the apparent disconnect between how catalogers talk about assessment and what we are actually doing.

## Q Methodology

I used Q methodology to develop a better understanding of the perspectives catalogers have about assessment and how they perceive their institutional values about assessment. The concourse for this study (described below) is based on the discourse represented in the following literature review.

As described by van Exel and de Graaf,<sup>7</sup> Q methodology uses small sample sizes to identify common viewpoints in participant communities. Participants provide their subjective response to a series of statements by ranking those statements into a distribution with a fixed

structure, usually approximating a normal distribution. For this study, envision a triangle: participants ranked each statement from least to most like their opinion, with the tallest part of the triangle containing the neutral responses, and the shorter edges containing their most positive and negative responses. The statements participants respond to are identified from the discourse surrounding a particular topic, called the concourse. As a sub-set of the concourse, the set of statements that are to be ranked is called the Q-set. The participants are selected because they provide a broad representation of viewpoints within the overall subject population.

The researcher then conducts a factor analysis of those rankings to determine factor loadings and identify similar viewpoints among individuals. The factor analytic procedure used in Q research treats participants as variables and Q-statements as cases, which is the opposite of the R methodology convention for data architecture. Those factor loadings are computed based on intercorrelations among Q-sorts and allow the researcher to identify themes in participant perceptions. Then factor rotation is performed to clarify the factor solution and facilitate a cleaner interpretation of the factors.

While the book by McKeown and Thomas<sup>8</sup> is a common starting text to get an overview of the methodology, Webler, Danielson and Tuler<sup>9</sup> provide a step-by-step explanation of how to use Q to identify social perspectives.

#### Cataloging Assessment Values as Expressed in the Literature

*Quality control* Below is a selection of ideas expressed in the literature, ideas that were used to develop the Q-statements. They represent a variety of perspectives related to quality control. Within the literature on cataloging assessment, this area seems to be the most written about.

One very formal quality management process is International Organization for Standardization (ISO) quality certification. Quality in this paradigm is viewed as multilayered,

continuous, and relative to the needs and expectations of users. Using this process requires libraries to continually evaluate all services, procedures and resources from both internal and external perspectives, employees and customers. In terms of internal audits, which might be of more interest to cataloging units, the objective is to develop a culture of quality, including relevant ethics, values, communication, cooperation, and reflection. Part of this culture of quality includes the values of creativity and innovation, which will be stifled in an overly controlling atmosphere. In Balagué's words, "The adherence to procedure does not necessarily result in better performance; it just means that rules are followed."<sup>10</sup>

Another formal quality management system is the balanced scorecard approach. Kim<sup>11</sup> describes how this process was used to evaluate the overall performance of the cataloging department at Hanyang University. The purpose of this activity was to become more proactive in adapting to changes in the field of cataloging, in alignment with organizational goals, rather than assessing productivity out of context. It was also used to cultivate a culture in which employees develop a better awareness of high and low-value activities through ongoing evaluation. However, once again echoing Simon's directive to use different methods of evaluation to assess different objectives, Kim cautions that through this process "aspects of work that cannot be measured or evaluated are bound to be dismissed as insignificant."<sup>12</sup>

The final formal, holistic quality management system presented here is Total Quality Management (TQM). TQM is based on meeting user needs, with an organizational focus on understanding customers. Khurshid<sup>13</sup> discusses several ways of using TQM in cataloging to identify and solve problems in a systematic way. One of the chief ways of implementing TQM is through staff training and development, which can include continuing education, well-documented processes and procedures, and employee recognition.

Switching to cataloging-specific research on quality assessment that is not based on a business model, Van Wyk<sup>14</sup> looks at performance indicators, of cataloging quality: timeliness, accuracy, completeness, and consistency. Van Wyk, like Kim, also relates the process of determining performance indicators to the institution's vision, values, goals, and objectives.

In terms of specific aspects of cataloging quality, Tsui and Hinders<sup>15</sup> argue that authority control is the most important measure of quality, given its impact on searching and retrieval in library catalogs. Unfortunately, I was not able to find any studies of authority control efficacy in an environment of discovery layers. Another specific measure of cataloging quality is error rates. Fairclough<sup>16</sup> identifies several studies that discuss ways to systematically identify typographical, classification, and access errors in the catalog, which can prevent access to some works in both online and physical environments.

In seeking appropriate measures for assessing technical services work, Mitchell<sup>17</sup> evaluates the use of quantitative data and user perception studies. While statistics gathered by ARL and NCES are a common data source, he suggests that other sources of data such as log data and user observations are a better measure of conclusions about the value, quality and costs of metadata.

Simpson, as noted in Brownell's report of the ALCTS Technical Services Workflow Efficiency Interest Group meeting in 2013, suggests focusing more closely on access points in electronic resources than on print materials "because serendipity can lead a patron to find an item on a shelf, but discovery of an electronic resource leans almost exclusively on metadata."<sup>18</sup>

*Efficiency and Production* Another category of cataloging assessment that receives a good deal of attention in the literature is efficiency and production.

Fletcher and Peck<sup>19</sup> explore the boundaries of how cataloging is defined. They discuss merging work processes originally thought of as separate acquisitions and cataloging responsibilities to provide cataloging on receipt for print books. Taking a broader look at the work these two technical services units were doing led to improved efficiency; by getting books to the shelves faster, they were able to better respond to patron expectations.

An administrative expectation to do more with less led Benaud, Bordeianu, and Hanson<sup>20</sup> to create a point system to evaluate individual cataloger production in a quantitative way. The point system was based on generally mechanistic criteria with minimum expectations and points assigned for different categories of materials. While productivity was the incentive for this project and it also provided supervisors with an objective measuring tool, the authors also highlight the less tangible benefits, including allowing catalogers more autonomy in accomplishing their work. Benaud, Steinhagen, and Moynahan<sup>21</sup> continue this conversation by focusing on the benefits that flexible scheduling brought to the cataloging unit.

After comparing survey responses from technical services managers at ARL libraries, McCain and Shorten<sup>22</sup> note that outsourcing authority work and discontinuing low-value activities should allow cataloging staff time to attend to other tasks. However, they caution that drawing conclusions about the efficiency of a technical services unit from this sort of institutional comparison is difficult because libraries can be very different organizationally. Once again going back to Simon, different objectives require different measurements. They also argue against overly simplistic measures, such as only counting the number of titles cataloged per person to determine efficiency.

Writing about high versus low-demand fields within catalog records, Preston<sup>23</sup> discusses her attempt to catalog new National Bureau of Economic Research papers in a more efficient



fashion. Constrained by her overall workload, Preston identified three ways to improve efficiency: make use of OCLC macros, streamline the MARC record, and conduct a workflow analysis. This allowed her to focus on the high-value fields, which are also more complex and stimulating, such as authority headings and subject analysis.

Another example of a workflow assessment to improve efficiency is Dragon and Barricella's<sup>24</sup> time-and-path study. This study had three goals: to find out how long it took new materials to go from arrival to shelving, to identify bottlenecks, and to ensure that the physical space was optimally configured. Through that project, they were able to identify acceptable processing time and ways to consistently achieve it, adjust staffing assignments to address bottleneck areas, and confirm that their physical arrangement was conducive to workflow needs.

*Cost* An area of cataloging assessment that has been tangentially mentioned in other sections is cost. Specific elements of the cost discussion are identified below.

McCain and Shorten's<sup>25</sup> article on cataloging efficiency also devotes significant attention to cost. They note that many cost studies try to identify ways of increasing output without adding staff time or other resources, ignoring issues of quality and backlogs. While they note that shared cataloging initiatives have reduced cost and increased productivity overall, they, like Mitchell in the introduction, note that identifying consistent staffing and productivity cost benchmarks is difficult due to the differences between libraries.

Stalberg and Cronin<sup>26</sup> note that despite decades of attention, the profession has lacked operational definitions of value and cost. While they provide a values framework in their article (referenced below), until these concepts are broadly incorporated into library assessment practices, logical decision making in this area is impossible. Stalberg and Cronin also reference Gorman<sup>27</sup>, arguing against cataloging low-value or ephemeral resources when limited resources

would be better spent on cataloging high-value and long-lasting resources<sup>28</sup>. Some cost measures that they were able to identify include salary related to production time and related to database maintenance time, the cost of cataloging tools, the cost of training and staff development. Of note, they question whether the purpose of such study is to reduce overall cataloging costs or to determine whether cataloging tasks are worth their cost. They also identify opportunity costs, or time spent on low-value vs. high-value activities, as an area that needs additional study.

*Workflow structure* When discussing how the University of Nevada, Reno Libraries reorganized their technical services unit to better respond to shifts in work expectations and user demands, Yue<sup>29</sup> identifies several key pieces that made that change in organizational structure successful. First, she ties the strategic directions the unit identified to the library's strategic priorities, notes the importance of monitoring trends and making selective implementation decisions, highlights the importance of communicating internally (within technical services) and externally (with stakeholders outside technical services), and notes the need to diligently invest in professional development opportunities for staff. All of these factors relate to building and maintaining a workplace that utilizes ongoing assessment for decision-making.

Canepi<sup>30</sup> presents a workflow analysis that was used to determine which procedures could be modified or eliminated, which changes to work assignments are necessary, and how librarians and paraprofessional spend their time. One of the outcomes of this project was to identify non-workflow tasks, which include communication via e-mail, meetings, supervision, activity tracking, research, and more.

*Workplace culture* One area about which less has been written and that has a less clearly defined scope is workplace culture. Workplace culture is inclusive of discussion about how work units are delineated, communication processes, and more.

Herrera, Cheng, Leslie, and Harry<sup>31</sup> observe that libraries conduct internal studies for purposes including performance review and workplace organization. In their study, they compare perceptions of technical services staff and non-technical services staff about the importance of cataloging and database maintenance. Of note in this study are the different priority levels technical services and non-technical services staff assign to different services. This may indicate a need for more communication (e.g., there are different kinds of outsourcing) or it may indicate different group perceptions about user needs. There also seemed to be different perceptions about which elements of database maintenance are important, the value of authority control, and whether or not certain functions were the responsibility of technical services. As a result of this study, members of technical services at their library were included in more library-wide committees and proactively shared information in face-to-face communication.

Other areas of workplace culture include the response to concepts such as social justice. While she does not specifically reference the relationship to formal assessment practices, Drabinski<sup>32</sup> questions the ability of subject analysis and classification to ever provide fully correct access to information from a queer perspective. Olson has also written many critiques of classification theory from a social justice perspective. Olson's critiques come from several angles: in some cases, she uses a feminist perspective to advocate for change,<sup>33</sup> in other articles she questions the Western-centric nature of Dewey Decimal classification.<sup>34</sup> Olson also collaborated with Schlegl to explore ways to reduce systemic bias in subject analysis across axes of discrimination including gender, age, ability, religious affiliation and more.<sup>35</sup>

*Usability* According to Hider and Tan, the "most commonly used measures of cataloging quality are 'level,' that is, the amount of data contained in records, or claimed to be contained, and error rate, that is, the number of errors, or types of error, found per record."<sup>36</sup> Errors include omitted, incorrect, uncontrolled, or improperly formatted information. In particular, the authors note that they had seen no studies that clearly and reliably identified which types of errors are more detrimental for access. Indeed, when they attempted their own test of error rankings, they found that low inter-cataloger reliability (low agreement between catalogers on what constitutes a quality record) prevented them from reaching meaningful conclusions. As a result, they then conducted user interviews to discover their users' search goals, search strategies, how users interpreted catalog information, and what information users wanted to see in the records. Through this, they were able to identify high- and low-value MARC fields and subfields. They argue that cataloging professionals need to define quality in terms of user needs using evidence-based cataloging.

Elhard and Jin<sup>37</sup> discuss using internal focus groups to assess cataloging services. The authors referred to library staff as their client base and used focus groups to solicit their input, involvement, and support for technical services broadly. Themes from those sessions were identified and used to create unit priorities. As has been mentioned in other articles referenced in this paper, one of the most prominent themes was a lack of shared understanding about the organizational structure of the cataloging unit and about how things are cataloged. Elhard and Jin used the results of these focus groups to engage in outreach about existing practices rather than trying to change cataloging practices to match user expectations.

As mentioned in the cost section, operational definitions are needed for a systematic assessment process. Stalberg and Cronin<sup>38</sup> reviewed the ALCTS Heads of Technical Services in

Large Research Libraries Interest Group Task Force on Cost/Value Assessment of Bibliographic Control's seven operational definitions of value. These are: (1) Discovery Success, (2) Use, (3) Display Understanding, (4) Ability of Library Bibliographic Data to Operate on the Open Web and Interoperate with Vendors and Suppliers in the Bibliographic Data Chain, (5) Ability to Support FRBR User Tasks, (6) Throughput and Timeliness, and (7) Ability to Support the Library's Administrative and Management Goals. As a result of the work of this task force, they were able to identify several possible areas of research to support improving usability. These include examining log data to see how users are finding materials, testing machine interoperability, and evaluating the impact of backlogs.

*Training and Development* In Charbonneau's exploration of the benefits and drawbacks of developing cataloging benchmarks, she notes that "research on cataloging productivity centers on defining unit costs in order to measure and evaluate a specific library's overall success within its own organization," but very little examines the performance of individual catalogers.<sup>39</sup> In an effort to fill that gap, the author looks at performance appraisal systems, observing that relevant literature frequently cites the importance of formal feedback based on objective standards determined in consultation with employees, despite the lack of empirical evidence supporting claims about benchmarks improving productivity or consultation improving morale.

Park, Tosaka, Maszaros and Lu observe that "there is a critical lack of comprehensive continuing education opportunities for cataloging and metadata professionals."<sup>40</sup> They administered a survey to query professionals about their training preferences. Respondents indicated a strong preference for short workshops and conferences rather than longer-duration courses for credit. However, while their study examines the types of continuing education opportunities individuals pursue and the types of institutions individuals work at, there is

minimal discussion of the sort of institutional support or professional expectations that would truly foster this time of ongoing learning. Indeed, the authors themselves note a possible gap between personal preferences and organizational support.

In terms of RDA training in particular, Tosaka and Park<sup>41</sup> note a significant divide between catalogers at research universities and catalogers at smaller colleges and universities. The results of their survey indicated that most respondents did not know how much time was necessary to spend on RDA training. However, among respondents who did indicate an expected duration, respondents from most 4-year institutions expected that 1-10 hours of training for librarians and paraprofessionals was adequate (it was not clear from the Tosaka and Park article whether they meant 1-10 hours per year or 1-10 hours for one-time training). Respondents from most research universities indicated that 31-40 hours was necessary for librarians and 1-10 hours for paraprofessionals. As for catalogers in community colleges, the authors found that only 3.2% of survey responses were from that cohort.

## Methodology

### Concourse

For this study, the above literature review was conducted to select the concourse, which is a representative sample of the discourse surrounding cataloging assessment. From the concourse, a heterogeneous set of items is selected for use, called the Q-set. In addition to statements found in the literature, the Q-set also included the ALA values statements about the social role of libraries. Knowing that at least one of the libraries selected for participation would include a private religious college, the concept of doing assessment activities grounded in religious values was also introduced to the Q-set. In total, 54 statements were used in the Q-set, which participants were asked to rank twice on a nine-point relative scale (-4 to +4) in a

Figure 1. Q-Set Sort Sheet

-4 Least Like	-3	-2	-1	0  Neutral	+1	+2	+3	+4  Most Like

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## Site Visits

After receiving IRB approval, I visited four academic libraries to conduct Q-sorts, with eight participants in total: one participant from three separate libraries and five participants from one library. The goal was to get enough variety in perspectives to be meaningful. These site visits also provided me with opportunities to talk with participants and become more familiar with their libraries and their communities.

Two libraries in the study were at mid-sized public universities and two libraries were at small private institutions. One library was part of a private religious college. One library was part of an institution with a Carnegie classification of “RU/VH” (Research University with very high research activity; formerly “R1”). Of the participants, six were MLS librarians: one with less than a year of cataloging experience, another with over twenty years of cataloging experience, three with supervisory responsibilities, and one who self-identified as being an electronic resources librarian more than a cataloging librarian. Two participants were cataloging technicians with over a decade of experience. Seven of the eight participants were female, all were White, and all were native English speakers.

## Results

Based on the Q-sorts administered to participants, I conducted a factor analysis to identify themes using the PQMethod software package. Factor analysis identifies patterns, or themes, among variables within a data set. Remember that in Q methodology, participants are treated as variables. The PQMethod software identified the number of factors needed to describe a pattern or relationship between variables (e.g., a theme in participant responses). Rotating the factor analysis helped me to understand the nature of those factors. I gave the factors names reflective of their natures. The PQMethod software also tells how well the factors explain the



data by providing correlation information. The themes I identified using this process are presented below, for both personal opinions and participant perceptions of organizational values.

Table 1. Themes Identified

Personal	Process Focus Big Picture Focus
Organizational	Return on Investment (ROI) Focus Service Focus Innovation Focus

### Personal Values

This section describes participants' subjective opinions about cataloging assessment. Two significant factors were identified. The correlation between the factor scores was 0.13. Pearson coefficients close to either -1 or +1 are considered strong correlations; coefficients close to 0 are considered weak correlations. A factor score of 0.13 indicates a weak correlation. In other words, these are distinct factors, distinct themes in participant responses, with little redundancy or overlap.

*Factor 1 = Process Focus* Individuals who fall in this category indicated higher values for doing cataloging assessment by looking at technical services workflow overall and using information to make process changes (i.e., how to do things). The statements in their responses that distinguish this category from Factor 2 are prioritizing ILS usability; cataloging workflow alone; looking at backlogs; university goals; and hours spent cataloging.

*Factor 2 = Big Picture Focus* Individuals who fall in this category indicated higher value for assessing cataloging based on freedom to share ideas internally, freedom to share ideas externally, and creative thinking. Compared to participants in the Process Focus category, these individuals are less concerned about looking at ILS usability, cataloging workflow alone, university goals, and hours spent cataloging.

Consensus points are statements that were not statistically significant (i.e., had  $p$  values equal to or greater than .05) and did not distinguish between any pair of factors. There were several points of agreement between participants who fall in the Process Focus theme and the Big Picture Focus theme, including strong support for access, service, efficiency, and looking at online catalog and/or discovery tool usability.

Most personal responses fell in the Process Focus theme. Only two participants had responses included in the Big Picture Focus: one works at an RU/VH institution, the other is a cataloging technician, neither has supervisory responsibilities.

### Organizational Values

This section describes participant perceptions of their institution's values in relation to cataloging assessment. Three significant factors were identified. Pearson coefficients close to either -1 or +1 are considered strong correlations; coefficients close to 0 are considered weak correlations. The correlation between Factor 1 and Factor 2 was 0.31, which is a medium effect size but still a distinct factor. The correlation between Factor 1 and Factor 3 was -.13, and the correlation between Factor 2 and Factor 3 was 0.02. These are weak correlations and therefore indicate that there is little redundancy between factor scores. In other words, these are distinct themes in participant responses, with little overlap.

*Factor 1 = Return on Investment (ROI) Focus* Participants belonging to this factor perceived that their institution's assessment priorities are based on online catalog and/or discovery tool usability, physical resources cataloging, creating reports to share externally, descriptive analysis, and the number of titles cataloged. Participants perceived that their institutions place significantly less value on confidentiality and privacy and, especially in comparison with the other themes, much less value on social justice, both in hiring and employee relations and in subject analysis and classification.

*Factor 2 = Service Focus* Participants belonging to this factor perceived that their institution's assessment values are based on broad goals surrounding service and access, as well as per unit cataloging cost. During the Q-sort, none of the respondents mentioned how they interpret service or access for the purposes of cataloging assessment. Record quality through spot checking, number of authority records created or modified, and the public good were of lower perceived institutional interest.

*Factor 3 = Innovation Focus* Participants belonging to this factor perceived that their institution's assessment values are based on flexibility of scheduling, creative thinking, and having a culture that supports sharing ideas externally and freedom to innovate. The issues of catalog and/or discovery tool usability, access, and service were of less concern in this factor. Respondents in this group are orientated both positively and negatively toward this theme. A negative orientation indicates that opposition to the ranking of these values is stronger than their affinity to any of the other themes. To rephrase, one participant perceives little institutional interest in usability, access, or service; the other participant has the opposite perspective.

Consensus points are statements that were not statistically significant (i.e., had  $p$  values equal to or greater than .05) and did not distinguish between any pair of factors. There were

several points of agreement between the three Organizational themes (ROI, Service, and Innovation Focus), although these were mostly found in the moderately and negatively ranked statements. Remember that statements are ranked on an array, so moderately ranked statements are somewhat like participant perceptions and negatively ranked statements are least like participant perceptions. These consensus statements show that participants perceived that their institutions have less interest in doing cataloging assessment based on diversity, religious values, staff empowerment or documentation available for staff, or how the unit responds to mistakes. Statements with slightly positive scores included preservation and cost of tools.

The organizational responses were distributed almost evenly among the three factors. The ROI Focus responses include the cataloger at an RU/VH institution and two librarians from the same mid-sized public institution. The Service Focus responses include a cataloger from a small religious college and two catalogers from the same mid-sized public institution. The Innovation Focus responses include a cataloging technician (with a positive orientation to this theme) and a librarian with supervisory responsibilities (with a negative orientation to this theme).

## Discussion

**Major Findings** When comparing perspectives, some statements stand out as differentiators between themes. Catalog/discovery tool usability was indicated as a value for both personal themes (Process Focus and Big Picture Focus). For organizational themes, it was part of the ROI Focus theme. It was also part of the Innovation Focus theme in a way that indicates that participants had strong perceptions of the institutional importance of usability, but placed the usability card at different ends of the distribution.

Service and access were consensus points for both personal themes and were perceived as being of high value for the organizational Service Focus theme. In the Innovation Focus theme,

service and access were perceived as being less important by one participant and as being very important by another.

**Limitations** Service and access were the only ALA core values that were perceived as important within the organizational factors. Unfortunately, I did not ask participants to provide their explanation of what those statements meant to them in the context of cataloging assessment. Therefore, I do not know if participants were thinking of access in terms of being able to identify what the library has and easily accessing that resource, access in terms of the ALA values statement about equitable access to library resources for all user populations, or something else. Similarly, it is unclear if service was thought of as an attitudinal quality or if it incorporates the ALA stance on professional development. In regard to the latter, a consensus statement for the organizational factors is disinterest in staff development, which leads me to suspect that the definition of service that participants were using is not completely aligned with the ALA core values statements. However, since I did not ask participants to describe their reasoning when doing the Q-sorts, that is just speculation.

**Recommendations** Based on this set of Q-sorts, I was unable to find a pattern indicating any overall commonalities between personal and organizational statements. However, while only the Process Focus participants indicated ILS usability was important, online catalog/discovery tool usability was a consensus statement for both personal themes as well as for two of the organizational themes. This area of consensus can serve as a starting point in discussions about how to reflect both cataloging values and institutional priorities in cataloging assessment practices.

In terms of organizational assessment priorities, online catalog/discovery tool usability is referenced in the ROI Focus and in the Innovation Focus themes. This could indicate an

institutional priority of identifying how users conduct research using catalog/discovery tools, how users interact with the metadata within those tools, or something else. When you contrast this perceived priority for having usable research tools with the perception that subject analysis and classification are not valued, which also appear in the ROI and Innovation themes, it raises several questions. Subject analysis and classification create metadata that users interact with. If metadata usability is a factor in catalog/discover tool usability, it may be a way to refocus the conversations surrounding usability to explicitly include metadata quality. As I mentioned at the beginning of this paper, quality control is one of the most frequently written-about aspect of cataloging assessment. Again, this supports the idea that catalog/discovery tool usability is a possible avenue to follow to find commonalities between cataloging professionals and administrative personnel, which could lead to the development of mutually agreeable cataloging assessment practices.

## Conclusion

Q methodology is not a tool one can use to find an objective right answer; however, by looking for a pattern of characteristics expressed by individuals with differing perspectives, one can develop a better understanding of the social dimensions surrounding the research question. One thing to note is that if the Q-sets had been different or if participants had been asked to do a Q-sort at a different point in time, the patterns identified here might have differed. For that reason, it would be beneficial to conduct additional research in this area.

In the future, it would be useful to modify the concourse to remove statements that did not differentiate between perspectives and to add statements that provide more granularity in terms of how values are expressed through actions. For example, in this study, several factors indicate a value for access, but no specific statements about how to incorporate access in cataloging practice were included in the Q set. It would also help to use think-aloud protocols to

collect participant explanations of why they put cards in a certain place as they do the card sort. This could also involve including a semi-structured interview to get more information about participants' thought processes.

The intent of this project was to identify whether there is a gap between catalogers' personal values and their perceptions of their institutions' values. The patterns identified through these sorts support that idea. By continuing to search for shared ground between catalogers and administrative bodies about how to assess cataloging activities, we may be in a better position to develop best practices that support our professional values and institutional demands. Understanding the values individuals bring to making cataloging assessment decisions may help us as a profession to have more meaningful discussions about when to use which assessment tools.

## Appendix 1

### Cataloging Assessment Values: Personal inventory

1. It is important to assess cataloging services in terms of access.
2. It is important to assess cataloging services in terms of confidentiality and privacy.
3. It is important to assess cataloging services in terms of democracy.
4. It is important to assess cataloging services in terms of diversity.
5. It is important to assess cataloging services in terms of education and lifelong learning.
6. It is important to assess cataloging services in terms of intellectual freedom.
7. It is important to assess cataloging services in terms of preservation.
8. It is important to assess cataloging services in terms of the public good.
9. It is important to assess cataloging services in terms of professionalism.

10. It is important to assess cataloging services in terms of service.
11. It is important to assess cataloging services in terms of social responsibility.
12. It is important to assess cataloging services in terms of hours spent cataloging.
13. It is important to assess cataloging services in terms of hours spent on database maintenance.
14. It is important to assess cataloging services in terms of number of titles cataloged.
15. It is important to assess cataloging services in terms of number of authority records created or modified.
16. It is important to assess cataloging services in terms of record quality through spot checking.
17. It is important to assess cataloging services in terms of record quality based on examining encoding level, error rate, types of errors, etc.
18. It is important to assess cataloging services in terms of per unit cataloging cost.
19. It is important to assess cataloging services in terms of documentation available for staff.
20. It is important to assess cataloging services in terms of training provided.
21. It is important to assess cataloging services in terms of the cost of tools (Cataloger's Desktop, Classification Web, etc.).
22. It is important to assess cataloging services in terms of cataloging workflow alone.
23. It is important to assess cataloging services in terms of technical services workflow (broader than cataloging alone).
24. It is important to include the determination of whether titles added are worth cataloging when assessing cataloging services.



25. It is important to assess cataloging services by looking at log data to see how users are finding materials.
26. It is important to assess cataloging services in terms of backlogs.
27. It is important to assess cataloging services by questioning low-value vs high-value activities.
28. It is important to assess cataloging services in terms of ILS usability.
29. It is important to assess cataloging services in terms of online catalog and/or discovery tool usability.
30. It is important to assess cataloging services in terms of purchase on demand acquisitions.
31. It is important to assess electronic resources cataloging.
32. It is important to assess physical resources cataloging.
33. It is important to assess cataloging services in terms of efficiency.
34. It is important to assess cataloging services in terms of flexibility in response to external requests.
35. It is important to assess cataloging services in terms of flexibility of scheduling.
36. It is important to assess cataloging services in terms of workload distribution.
37. It is important to assess cataloging services in terms of creative thinking.
38. It is important to assess cataloging services in terms of how the unit responds to mistakes.
39. It is important to assess cataloging services in terms of how staff are empowered to make changes.
40. It is important to assess cataloging services in terms of social justice in hiring and employee relations.

41. It is important to assess cataloging services in terms of social justice in subject analysis and classification (related to gender, ability, ethnicity, etc.)
42. It is important to assess cataloging services in terms of ethics.
43. It is important to assess cataloging services in terms of freedom to innovate.
44. It is important to assess cataloging services in terms of freedom to share ideas internally (conversation to cross-training).
45. It is important to assess cataloging services in terms of freedom to share ideas externally (discussions with those outside the unit, outside the library).
46. It is important to assess cataloging services in terms of religious values (or other formal belief systems)
47. It is important to assess cataloging records in terms of subject analysis.
48. It is important to assess cataloging records in terms of descriptive analysis.
49. It is important to assess cataloging records in terms of machine interoperability.
50. It is important to assess cataloging services in terms of university goals.
51. It is important to assess cataloging services by comparing it with other institutions (through ACRL or IPEDS statistics, etc.).
52. It is important to assess cataloging services in terms of creating reports to share externally.
53. It is important to use cataloging assessment information to make process (how) changes.
54. It is important to use cataloging assessment information to make organizational (who) changes.

## Appendix 2

### Cataloging Assessment Values: Organizational Inventory

1. My library values assessing cataloging services in terms of access.
2. My library values assessing cataloging services in terms of confidentiality and privacy.
3. My library values assessing cataloging services in terms of democracy.
4. My library values assessing cataloging services in terms of diversity.
5. My library values assessing cataloging services in terms of education and lifelong learning.
6. My library values assessing cataloging services in terms of intellectual freedom.
7. My library values assessing cataloging services in terms of preservation.
8. My library values assessing cataloging services in terms of the public good.
9. My library values assessing cataloging services in terms of professionalism.
10. My library values assessing cataloging services in terms of service.
11. My library values assessing cataloging services in terms of social responsibility.
12. My library values assessing cataloging services in terms of hours spent cataloging.
13. My library values assessing cataloging services in terms of hours spent on database maintenance.
14. My library values assessing cataloging services in terms of number of titles cataloged.
15. My library values assessing cataloging services in terms of number of authority records created or modified.
16. My library values assessing cataloging services in terms of record quality through spot checking.
17. My library values assessing cataloging services in terms of record quality based on examining encoding level, error rate, types of errors, etc.
18. My library values assessing cataloging services in terms of per unit cataloging cost.

19. My library values assessing cataloging services in terms of documentation available for staff.
20. My library values assessing cataloging services in terms of training provided.
21. My library values assessing cataloging services in terms of the cost of tools (Cataloger's Desktop, Classification Web, etc.).
22. My library values assessing cataloging services in terms of cataloging workflow alone.
23. My library values assessing cataloging services in terms of technical services workflow (broader than cataloging alone).
24. My library includes the determination of whether titles added are worth cataloging when assessing cataloging services.
25. My library values assessing cataloging services by looking at log data to see how users are finding materials.
26. My library values assessing cataloging services in terms of backlogs.
27. My library values assessing cataloging services by questioning low-value vs high-value activities.
28. My library values assessing cataloging services in terms of ILS usability.
29. My library values assessing cataloging services in terms of online catalog and/or discovery tool usability.
30. My library values assessing cataloging services in terms of purchase on demand acquisitions.
31. My library values assessing electronic resources cataloging.
32. My library values assessing physical resources cataloging.
33. My library values assessing cataloging services in terms of efficiency.

34. My library values assessing cataloging services in terms of flexibility in response to external requests.
35. My library values assessing cataloging services in terms of flexibility of scheduling.
36. My library values assessing cataloging services in terms of workload distribution.
37. My library values assessing cataloging services in terms of creative thinking.
38. My library values assessing cataloging services in terms of how the unit responds to mistakes.
39. My library values assessing cataloging services in terms of how staff are empowered to make changes.
40. My library values assessing cataloging services in terms of social justice in hiring and employee relations.
41. My library values assessing cataloging services in terms of social justice in subject analysis and classification (related to gender, ability, ethnicity, etc.)
42. My library values assessing cataloging services in terms of ethics.
43. My library values assessing cataloging services in terms of freedom to innovate.
44. My library values assessing cataloging services in terms of freedom to share ideas internally (conversation to cross-training).
45. My library values assessing cataloging services in terms of freedom to share ideas externally (discussions with those outside the unit, outside the library).
46. My library assesses cataloging services in terms of religious values (or other formal belief systems)
47. My library values assessing cataloging records in terms of subject analysis.
48. My library values assessing cataloging records in terms of descriptive analysis.

49. My library values assessing cataloging records in terms of machine interoperability.
50. My library values assessing cataloging services in terms of university goals.
51. My library values assessing cataloging services by comparing it with other institutions (through ACRL or IPEDS statistics, etc.).
52. My library values assessing cataloging services in terms of creating reports to share externally.
53. My library values using cataloging assessment information to make process (how) changes.
54. My library values using cataloging assessment information to make organizational (who) changes.

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